

Serial No. 10/726,962

PATENT

Amendments to Claims

1. (Original) A prosthesis for repair of an aortic aneurysm at least partially in the ascending aorta, the prosthesis being tubular and having a proximal end and a distal end and being formed from a biocompatible material, the proximal end being adapted to be surgically fastened adjacent and around the aortic heart valve of a patient and the distal end being adapted to extend into the descending aorta, the distal end including at least one self-expanding stent.

2. (Original) A prosthesis as in Claim 1 wherein the distal end of the prosthesis has an internal self expanding stent and a further uncovered self expanding stent extending therefrom.

3. (Original) A prosthesis as in Claim 2 wherein there is provided barbs on the uncovered self expanding stent.

4. (Original) A prosthesis as in Claim 1 wherein the tubular prosthesis is formed from a corrugated biocompatible material and is of varying diameter depending on what portion of the aorta it is intended to be deployed into.

5. (Original) A prosthesis as in Claim 1 wherein the prosthesis includes side branches or a portion adapted for connecting side branches where other major arteries extend from the aorta particularly in the region of the aortic arch.

6 to 18 (Cancelled).

19. (Currently Amended) A prosthesis mounted on a deployment device, the deployment device comprising a central catheter extending from a proximal end to a distal end, the proximal end in use remaining outside a patient and the distal end in use being inserted into the descending aorta of a patient, a nose cone on the distal end of the central catheter, the nose cone including means to retain the distal end of the prosthesis with the assistance of a trigger wire, and a deployment catheter co-axially

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around the central catheter and slidable longitudinally with respect to the central catheter and means to lock the movement of the deployment catheter with respect to the central catheter, the deployment catheter extending from adjacent the nose cone to a position which in use is outside the patient, the prosthesis being tubular and having a proximal end and a distal end and being formed from a biocompatible material, the proximal end ~~being adapted~~ to be surgically fastened adjacent and around the aortic heart valve of a patient and the distal end ~~being adapted~~ to extend in use into the descending aorta, the distal end including at least one self-expanding stent, the prosthesis being everted and the proximal and distal ends of the prosthesis being fastened to the distal end of the deployment device with the proximal end within the distal end and a central portion of the prosthesis extending proximally.

20. (Original) A prosthesis mounted on a deployment device as in Claim 19 wherein the central portion is mounted to a manipulator on the deployment device.

21. (Original) A prosthesis mounted on a deployment device as in Claim 19 wherein the distal end of the prosthesis has an internal self expanding stent and a further uncovered self expanding stent extending therefrom.

22. (Original) A prosthesis mounted on a deployment device as in Claim 21 wherein there are provided barbs on the uncovered self expanding stent.

23. (Original) A prosthesis mounted on a deployment device as in Claim 19 wherein the tubular prosthesis is formed from a corrugated biocompatible material and is of varying diameter depending into what portion of the aorta it is intended to be deployed.

24. (Cancelled)

25. (Currently Amended ) A prosthesis mounted on a deployment device as in Claim 24 further including a trigger wire arrangement ~~adapted~~ to retain the distal end of the prosthesis within the nose cone of the deployment device.

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26. (Original) A prosthesis mounted on a deployment device as in Claim 24 wherein the trigger wire is also adapted to retain the internal self-expanding stent in a retracted position about the deployment catheter.

27. (Currently Amended ) A deployment device as in Claim 24 wherein the nose cone is in the form of a proximally opening capsule ~~which is adapted~~ to retain the uncovered stent in a contracted condition and thereby also retain the barbs within the capsule before the uncovered stent is released.